TO: T10 Membership
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SUBJECT: T10/03-087r0, ADC Data Transfer Device Status Masking

This is a brief summary of how a SCSI command could be used to implement the sense data masking function. It has not been completely rendered into proper standards terminology.

1.1   MASK UNMASK SENSE Command

The ADC device server implements MASK UNMASK SENSE command (opcode TBD). Bit 0 of byte 4 is the Mask field, which when set turns on sense data masking; when cleared, it turns off masking.

Table x – MASK UNMASK SENSE Command

Bit Byte	7	6	5	4	3	2	1	0
0	OPERATION CODE (TBD)							
1	Reserved							
2	Reserved							
3	Reserved							
4	Reserved							MASK
5	CONTROL							

When MASK is set to one, the data transfer device server shall report a status of CHECK CONDITION, sense key of NOT READY, and additional sense code of LOGICAL UNIT IS IN PROCESS OF BECOMING READY to all initiators connected via a primary interface port. When MASK is set to zero, the data transfer device server shall report the status, sense key, and additional sense code appropriate to its condition.

1.2   Masked Mode Operation

While in sense data masked mode:
- The drive will continue to report 02/04/01 to in response to commands received via a primary interface port.
- The drive will remain in this mode across multiple insertions and removals by the automation, until exited as described below.
- The automation will see the unfiltered stream of statuses and SK/ASC/ASCQs.

1.3   Usage

- SMC device server receives MOVE MEDIUM command via SCSI/FC interface.
- Automation issues MASK UNMASK SENSE (Mask bit = 1) command to data transfer device.
- Automation inserts medium.
- Automation monitors data transfer device status until cartridge loading has either succeeded or failed.
- If automation abandons the load because of repeated failures, it either removes or leaves cartridge, issues MASK UNMASK SENSE (Mask bit = 0) to drive, and returns error status for MOVE MEDIUM.